



Docket No.: TEI-0122
(PATENT)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:
Ieyasu Kobayashi et al.

Application No.: 09/914,033

Confirmation No.: 8235

Filed: August 22, 2001

Art Unit: 3654

For: POLYESTER FILM ROLL

Examiner: W. A. Rivera

APPELLANT'S BRIEF

MS Appeal Brief - Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

INTRODUCTORY COMMENTS

This is an Appeal Brief under 37 C.F.R. §41.37 appealing the decision of the Examiner dated October 26, 2010. Each of the topics required by 37 C.F.R. §41.37 is presented herewith and is labeled appropriately.

This brief is in furtherance of the Office Action of October 26, 2010.

A Notice of Appeal and Appeal Brief Transmittal are being filed herewith.

Accordingly, the filing of this Appellant's Brief is timely. 37 C.F.R. §1.136.

Adjustment date: 12/27/2010 SDENR0B3
11719/2009 AVONDAF1 03000042 180013 09914033
02 FC:1402 540.00 CR

12/27/2010 SDENR0B3 00000083 180013 09914033
01 FC:1402 540.00 DA

I. REAL PARTY IN INTEREST

The real party in interest for this appeal is Teijin Limited of Osaka, Japan. An assignment of all rights in the present application to Teijin Limited was executed by the inventors and recorded by the U.S. Patent and Trademark Office at **Reel 012236, Frame 0719.**

II. RELATED APPEALS AND INTERFERENCES

The instant application on appeal

An Appeal Brief (“the **First** Appeal Brief”) has been filed in the instant application on September 5, 2006.

In response to the Examiner’s Answer of October 2, 2007, a Reply Brief was filed on December 3, 2007.

A Decision of the Board of Patent Appeals and Interferences was mailed in the instant application on April 30, 2009.

The Decision of April 30, 2009 *reversed the final rejection* of the examiner as to all of the pending claims within the instant application.

Subsequent to the Decision of the Board dated April 30, 2009, the non-final Office Action of September 2, 2009 *reopened prosecution* of the instant application.

An Appeal Brief (“the **Second** Appeal Brief”) has been filed in the instant application on November 18, 2009 along with a Petition Under 37 C.F.R. §1.181.

The Decision on Petition dated March 5, 2010 granted-in-part the Petition Under 37 C.F.R. §1.181.

Prior to a Decision from the Board, the non-final Office Action dated May 17, 2010 again reopened prosecution of the instant application.

Following an Amendment in Response to Non-Final Office Action filed on July 29, 2010, the Final Office Action dated October 26, 2010 was mailed in the instant application.

This Appeal Brief (“the **Third** Appeal Brief”) is in furtherance of the Final Office Action of October 26, 2010.

Continuation of the instant application

U.S. Patent Application No. 10/832,279 is a continuation of the instant application.

An Appeal Brief has been filed in the continuation application on October 9, 2007.

In response to the Examiner’s Answer of January 8, 2008, a Reply Brief was filed on March 10, 2008.

A Decision of the Board of Patent Appeals and Interferences was mailed on May 7, 2009 in U.S. Patent Application No. 10/832,279.

The Decision of May 7, 2009 reversed the final rejection of the examiner as to all of the pending claims within the continuation application.

Subsequent to the Decision of the Board dated May 7, 2009, the non-final Office Action of September 29, 2009 reopened prosecution of the continuation application.

An Appeal Brief has been filed in the instant application on December 23, 2009 along with a Petition Under 37 C.F.R. §1.181.

The Decision on Petition dated March 24, 2010 denied the Petition Under 37 C.F.R. §1.181.

An Examiner's Answer of October 27, 2010 has been mailed in response to the Appeal Brief of December 23, 2009.

No other appeals or interferences

There are no other appeals or interferences which will directly affect or be directly affected by or have a bearing on the Board's decision in this appeal.

III. STATUS OF CLAIMS

Within the Office Action of October 26, 2010:

Pages 2-4 of the Office Action indicates a rejection of claims 25-38 under 35 U.S.C. §103 as allegedly being unpatentable over U.S. Patent No. 4,576,344 (Sasaki).

Page 4 of the Office Action indicates a rejection of claims 39-42 under 35 U.S.C. §103 as allegedly being unpatentable over U.S. Patent No. 4,576,344 (Sasaki) in view of U.S. Patent No. 5,106,681 (Endo).

Page 4 of the Office Action indicates a rejection of claims 43-46 under 35 U.S.C. §103 as allegedly being unpatentable over U.S. Patent No. 4,576,344 (Sasaki) in view of U.S. Patent No. 4,911,951 (Ogawa).

Page 5 of the Office Action indicates a rejection of claims 47-48 under 35 U.S.C. §103 as allegedly being unpatentable over U.S. Patent No. 4,576,344 (Sasaki) in view of U.S. Patent No. 3,427,723 (Leckey).

Thus, the status of the claims is as follows:

Claims 1-24	Canceled
Claims 25-48	Rejected

No claims are indicated within the Office Action to contain allowable subject matter.

Accordingly, Appellant hereby appeals the final rejection of claims 25-48 which is presented in the Claims Appendix.

IV. STATUS OF AMENDMENTS

Provided is a statement of the status of any amendment filed subsequent to final rejection.

No Amendment has been filed subsequent to the Final Office Action.

V. SUMMARY OF CLAIMED SUBJECT MATTER

The following description is provided for illustrative purposes and is not intended to limit the scope of the invention. Reference is made to the specification as originally filed.

Claim 25 is drawn to a polyester film roll comprising: a roll of polyester film, said polyester film being rolled onto a core, wherein said core has a maximum outer diameter and a minimum outer diameter, the difference between said maximum and minimum outer diameters of the core being not more than 300×10^{-6} m.	Specification paragraph beginning on page 2, line 12. Specification paragraph beginning at page 5, line 30
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Claim 29 is drawn to the polyester film roll described in claim 25, wherein the flexural modulus of said core in the circumferential direction is not less than 13 Gpa.	Specification paragraph beginning at page 6, line 19
Claim 30 is drawn to the polyester film roll described in claim 25, wherein the surface roughness of said core is not more than $0.6 \mu\text{m}$.	Specification paragraph beginning at page 6, line 28
Claim 31 is drawn to the polyester film roll described in claim 25, wherein the degree of surface hardness of the core is not less than 65 degree.	Specification paragraph beginning at page 7, line 5
Claim 33 is drawn to the polyester film roll described in claim 25, wherein the difference between a maximum outer diameter of the roll and a minimum outer diameter of the roll is not more than $2W \times 10^{-3}$ and not more than $L \times 10^{-7}$, "W" being the width of the roll and "L" being the rolled length of the polyester film.	Specification paragraph beginning at page 3, line 33
Claim 39 is drawn to the polyester film roll described in claim 25, wherein said polyester film contains inactive particles.	Specification paragraph beginning at page 3, line 15
Claim 43 is drawn to the polyester film roll described in claim 25, wherein said polyester film supports a magnetic recording medium.	Specification paragraph beginning at page 7, line 24; Specification paragraph beginning at page 9, line 19
Claim 47 is drawn to the polyester film roll described in claim 25, wherein a plurality of diameters of said roll along the width direction of the roll is represented by a curved line having ends, a straight line connecting said ends of the curved line, wherein a maximum length from a maximum convex portion of said curved line to said straight line is not more than $500 \mu\text{m}$.	Specification paragraph beginning on page 8, line 9; Specification paragraph beginning on page 6, line 19; Specification paragraph beginning on page 7, line 14

VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

The issues presented for consideration in this appeal are as follows:

Whether the Examiner erred in rejecting claims 25-38 under 35 U.S.C. §103 as allegedly being unpatentable over U.S. Patent No. 4,576,344 (Sasaki).

Whether the Examiner erred in rejecting claims 39-42 under 35 U.S.C. §103 as allegedly being unpatentable over U.S. Patent No. 4,576,344 (Sasaki) in view of U.S. Patent No. 5,106,681 (Endo).

Whether the Examiner erred in rejecting claims 43-46 under 35 U.S.C. §103 as allegedly being unpatentable over U.S. Patent No. 4,576,344 (Sasaki) in view of U.S. Patent No. 4,911,951 (Ogawa).

Whether the Examiner erred in rejecting claims 47-48 under 35 U.S.C. §103 as allegedly being unpatentable over U.S. Patent No. 4,576,344 (Sasaki) in view of U.S. Patent No. 3,427,723 (Leckey).

These issues will be discussed hereinbelow.

VII. ARGUMENT

For at least the following reasons, Appellant submits that the rejection of the claims is both technically and legally unsound and should therefore be reversed.

For purposes of this appeal brief only, and without conceding the teachings of any prior art reference, the claims have been grouped as indicated below.

i. The Examiner erred in rejecting claims 25-38 under 35 U.S.C. §103 as allegedly being unpatentable over U.S. Patent No. 4,576,344 (Sasaki).

A. For this rejection only, claims 25-28, 32, and 34-38 stand or fall together.

Claims 26-28, 32, and 34-38 are dependent upon claim 25.

Claim 25 is drawn to a polyester film roll comprising:	
a roll of polyester film, said polyester film being rolled onto a core,	Specification paragraph beginning on page 2, line 12.
wherein said core has a maximum outer diameter and a minimum outer diameter, the difference between said maximum and minimum outer diameters of the core being not more than 300×10^{-6} m.	Specification paragraph beginning at page 5, line 30

1. U.S. Patent No. 4,576,344 (Sasaki) fails to disclose, teach, or suggest a polyester film roll *wherein the core has a maximum outer diameter and a minimum outer diameter, the difference between the maximum and minimum outer diameters of the core being not more than 300×10^{-6} m.*

Rejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness. *KSR International Co. v. Teleflex Inc.*, 82 USPQ2d 1385, 1396 (U.S. 2007).

Instead, the Patent and Trademark Office has the burden of showing a *prima facie* case of obviousness. *In re Bell*, 26 USPQ2d 1529, 1530 (Fed. Cir. 1993).

The Patent and Trademark Office may not, because it may doubt that the invention is patentable, resort to *speculation*, unfounded *assumptions* or *hindsight reconstruction* to supply deficiencies in its factual basis. *In re Warner and Warner*, 154 USPQ 173, 178 (C.C.P.A. 1967).

Page 2 of the Office Action readily admits that Sasaki is unclear as to the difference between the maximum and minimum outer diameters of the core.

Nevertheless, page 2 of the Office Action sets forth the following assertion:

The Sasaki roll must be able to maintain its form over a long period of time. Thus, any variation in the core's outer diameter would manifest itself to the film layers. As such it would have been obvious to one of ordinary skill in the art that any variations in the core diameter would be detrimental to the film of Sasaki because such would increase the chances of adjacent film slipping upon one another and therefore, the film roll is easily deformed thereby rendering the roll useless.

In response, conclusory statements do not fulfill the agency's obligation to explain all material facts relating to a motivation to combine. *DyStar Textilfarben GmbH & Co. Deutschland KG v. C.H. Patrick Co.*, 80 USPQ2d 1641, 1650 (Fed. Cir. 2006).

Conversely, assertions of technical facts in areas of esoteric technology must always be supported by citation to some reference work recognized as standard in the pertinent art. *In re Pardo and Landau*, 214 USPQ 673, 677 (CCPA 1982).

The support must have existed at the time the claimed invention was made. *In re Merck & Co., Inc.*, 231 USPQ 375, 379 (Fed. Cir. 1986).

Here, the Office Action fails to identify any disclosure within Sasaki, or any other objective evidence, for teaching that *any variations in the core diameter would be detrimental to the film of Sasaki because such would increase the chances of adjacent film slipping upon one another and therefore, the film roll is easily deformed thereby rendering the roll useless*.

At best, the unsupported assertions proffered within the Office Action are nothing more than broad conclusory statements.

Broad conclusory statements, standing alone, are not evidence. *In re Dembiczak*, 50 USPQ2d 1614, 1617 (Fed. Cir. 1999).

In addition to the absence of any objective supporting evidence or disclosure within Sasaki, it is impermissible, however, simply to engage in a hindsight reconstruction of the claimed invention, using the applicant's structure as a template and selecting elements from references to fill the gaps. *In re Gorman*, 18 USPQ2d 1885, 1888 (Fed. Cir. 1991).

In this regard, Appellant's own specification as originally filed notes the following in the paragraph beginning at page 5, line 30:

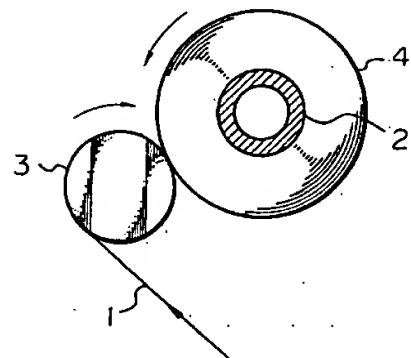
The outer diameter of the roll-shaped core of the polyester film roll in the present invention is especially not limited, but is usually 0.100 to 0.400 m. When the outer diameters of the roll shape of the core are measured in the width direction of the core, the difference (Rc) between the maximum value and the minimum value is preferably not more than 300×10^{-6} m, further preferably 200×10^{-6} m. When the difference (Rc) exceeds 300×10^{-6} m, the core is not preferable, because wrinkles and slacks are generated in the film roll by the effect of the core, even when the thickness unevenness of the polyester film is small. The roll shape of the core is desirably a crown shape in which the central portion of the core in the width direction and both the end portions of the core are thick and thin, respectively. The crown shape facilitates the outward removal of air between the films and the inhibition of wrinkle generation, when the polyester film is rolled. In the core of the crown shape, the difference between the diameter of the central portion and the diameters of both the end portions is preferably in the range of 0 m to 300×10^{-6} m.

To imbue one of ordinary skill in the art with knowledge of the invention on appeal, when no prior art reference or references of record convey or suggest that knowledge, is to fall victim to the insidious effect of a hindsight syndrome wherein that which only the inventor taught is

used against its teacher. *W.L. Gore & Associates, Inc. v. Garlock, Inc.*, 220 USPQ 303, 312-313 (Fed. Cir. 1983).

For the convenience of the Board, Figure 1 of Sasaki is provided herein below.

Fig. 1



Referring to FIG. 1, a polyester film 1 is fed from a film supply roll (not shown in FIG. 1) and is wound around a core 2 through a touch roll 3 so as to form a film roll 4 (Sasaki at column 4, lines 54-57).

When the winding procedure is carried out in accordance with the surface-center-winding method, the core 2 is connected to a motor (not shown in FIG. 1) and is rotated at a predetermined peripheral speed, so as to cause the touch roll 3, which is free from the motor, to rotate at the same peripheral speed as that of the resultant film roll 4 (Sasaki at column 4, lines 57-63).

When the winding procedure is carried out in accordance with the surface-winding method, the touch roll 3 is connected to a motor (not shown in FIG. 1) and is rotated at a predetermined peripheral speed, so as to cause the resultant film roll 4 on the core 2 to rotate at the same peripheral speed as that of the touch roll 3 (Sasaki at column 4, line 64, to column 5, line 1).

The core 2 may be connected to a motor (not shown in FIG. 1) and may be rotated at the same peripheral speed as that of the touch roll 3 (Sasaki at column 5, lines 2-4).

The hardness of the film 1 may be adjusted by varying the tension therein, by varying the speed of the core 2 and touch roll 3 as mentioned above, or by means of an idler roll (not shown) bearing laterally against the film 1 upstream of the touch roll 3 (Sasaki at column 5, lines 7-11).

However, Sasaki is silent as to the maximum outer diameter and minimum outer diameter of the core 2.

Thus, Sasaki fails to disclose, teach, or suggest a polyester film roll wherein the core has a maximum outer diameter and a minimum outer diameter, the difference between the maximum and minimum outer diameters of the core being not more than 300×10^{-6} m.

B. For this rejection only, claim 29 stands or falls alone.

Claim 29 is drawn to the polyester film roll described in claim 25,	
wherein the flexural modulus of said core in the circumferential direction is not less than 13 Gpa.	Specification paragraph beginning at page 6, line 19

1. U.S. Patent No. 4,576,344 (Sasaki) fails to disclose, teach, or suggest a polyester film roll *wherein the flexural modulus of the core in the circumferential direction is not less than 13 Gpa.*

Page 2 of the Office Action contends that:

With respect to Claim 29 it is deemed that the flexural modulus of the core of Sasaki et al in the circumferential direction is not less than 13 GPa since the polyester film rolls of the two working examples of Sasaki have the same film length, width, thickness, and rolling hardness as the applicant's polyester film roll.

In response, Sasaki is silent as to a film length, width, thickness, and rolling hardness of core 2.

Pages 2-3 of the Office Action further contend that:

In the alternative, however, even assuming arguendo that that is not the case, it would have been obvious to one of ordinary skill in the art to have provided the core with a high flexural modulus (i.e. not less than 13GPa) in the circumferential direction to obtain a stiff core to contribute in obtaining a more cylindrical roll, as noted above.

In response, this unsupported contention proffered within the Office Action is nothing more than another broad conclusory statement.

Furthermore, this unsupported contention is yet another instance of hindsight reconstruction of the claimed invention.

For example, Appellant's own specification as originally filed notes the following in the paragraph beginning at page 6, line 19:

The flexural modulus of the above-described core in the circumferential direction is preferably not less than 13 GPa, further preferably not less than 14 GPa. When the core having the flexural modulus not satisfying the range is used, the core is often deformed by a tension and a contact pressure generated when the polyester film is rolled. A method for adjusting the strength of the core within the range is especially not limited, but the strength of, for example, a carbon fiber-reinforced plastic core can be adjusted by suitably selecting the amount of the carbon fibers, and a desired strength is further obtained by adjusting the thickness of the core.

Thus, Sasaki fails to disclose, teach, or suggest a polyester film roll wherein the flexural modulus of the core in the circumferential direction is not less than 13 Gpa.

C. For this rejection only, claim 30 stands or falls alone.

Claim 30 is drawn to the polyester film roll described in claim 25, wherein the surface roughness of said core is not more than 0.6 μm .	Specification paragraph beginning at page 6, line 28
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1. U.S. Patent No. 4,576,344 (Sasaki) fails to disclose, teach, or suggest a polyester film roll *wherein the surface roughness of the core is not more than 0.6 μm .*

Sasaki is silent as to the surface roughness of the core 2.

Thus, Sasaki fails to disclose, teach, or suggest a polyester film roll *wherein the surface roughness of the core is not more than 0.6 μm .*

D. For this rejection only, claim 31 stands or falls alone.

Claim 31 is drawn to the polyester film roll described in claim 25, wherein the degree of surface hardness of the core is not less than 65 degree.	Specification paragraph beginning at page 7, line 5
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1. U.S. Patent No. 4,576,344 (Sasaki) fails to disclose, teach, or suggest a polyester film roll *wherein the degree of surface hardness of the core is not less than 65 degree.*

Sasaki is silent as to the surface hardness of the core 2.

Thus, Sasaki fails to disclose, teach, or suggest a polyester film roll *wherein the degree of surface hardness of the core is not less than 65 degree.*

E. For this rejection only, claim 33 stands or falls alone.

Claim 33 is drawn to the polyester film roll described in claim 25,	
wherein the difference between a maximum outer diameter of the roll and a minimum outer diameter of the roll is not more than $2W \times 10^{-3}$ and not more than $L \times 10^{-7}$, "W" being the width of the roll and "L" being the rolled length of the polyester film.	Specification paragraph beginning at page 3, line 33

1. U.S. Patent No. 4,576,344 (Sasaki) fails to disclose, teach, or suggest a polyester film roll *wherein the difference between a maximum outer diameter of the roll and a minimum outer diameter of the roll is not more than $2W \times 10^{-3}$ and not more than $L \times 10^{-7}$, "W" being the width of the roll and "L" being the rolled length of the polyester film.*

Sasaki is silent as to a difference between a maximum outer diameter of the roll and a minimum outer diameter of the roll.

Thus, Sasaki fails to disclose, teach, or suggest a polyester film roll *wherein the difference between a maximum outer diameter of the roll and a minimum outer diameter of the roll is not more than $2W \times 10^{-3}$ and not more than $L \times 10^{-7}$, "W" being the width of the roll and "L" being the rolled length of the polyester film.*

- ii. The Examiner erred in rejecting claims 39-42 under 35 U.S.C. §103 as allegedly being unpatentable over U.S. Patent No. 4,576,344 (Sasaki) in view of U.S. Patent No. 5,106,681 (Endo).

A. For this rejection only, claims 39-42 stand or fall together.

Claims 40-42 are dependent upon claim 39.

Claim 39 is drawn to the polyester film roll described in claim 25, wherein said polyester film contains inactive particles.	Specification paragraph beginning at page 3, line 15
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1. Arguments presented hereinabove with respect to U.S. Patent No. 4,576,344 (Sasaki) are incorporated by reference.

For the purpose of brevity, the argument presented hereinabove regarding Sasaki are incorporated herein by reference.

2. U.S. Patent No. 5,106,681 (Endo) fails to disclose, teach, or suggest a polyester film roll wherein the core has a maximum outer diameter and a minimum outer diameter, the difference between the maximum and minimum outer diameters of the core being not more than 300×10^{-6} m of claim 25.

Claim 39 is dependent upon claim 25.

Endo arguably discloses that in the present invention, the particles added to be contained in polyester for improving the surface flatness and slipping properties of the produced film are the fine spherical silica particles having an average diameter of 0.01 to 3.0 μm (Endo at column 3, lines 33-36).

However, within claim 25, the core has a maximum outer diameter and a minimum outer diameter, the difference between said maximum and minimum outer diameters of the core being not more than 300×10^{-6} m.

Here, Endo is silent as to the features of a core found within independent claim 25.

Thus, Endo fails to disclose, teach, or suggest a polyester film roll *wherein the core has a maximum outer diameter and a minimum outer diameter, the difference between the maximum and minimum outer diameters of the core being not more than 300×10^{-6} m.*

iii. The Examiner erred in rejecting claims 43-46 under 35 U.S.C. §103 as allegedly being unpatentable over U.S. Patent No. 4,576,344 (Sasaki) in view of U.S. Patent No. 4,911,951 (Ogawa).

A. For this rejection only, claims 43-46 stand or fall together.

Claims 44-46 are dependent upon claim 43.

Claim 43 is drawn to the polyester film roll described in claim 25,	
wherein said polyester film supports a magnetic recording medium.	Specification paragraph beginning at page 7, line 24; Specification paragraph beginning at page 9, line 19

1. Arguments presented hereinabove with respect to U.S. Patent No. 4,576,344 (Sasaki) are incorporated by reference.

For the purpose of brevity, the argument presented hereinabove regarding Sasaki are incorporated herein by reference.

2. U.S. Patent No. 4,911,951 (Ogawa) fails to disclose, teach, or suggest a polyester film roll *wherein the core has a maximum outer diameter and a minimum outer diameter, the difference between the maximum and minimum outer diameters of the core being not more than 300×10^{-6} m of claim 25.*

As an initial matter, page 5 of the Office Action refers to claims 6 and 9.

However, claims 6 and 9 have been canceled by a prior amendment. As a consequence, the Office Action lacks clarity.

In addition, claim 43 is dependent upon claim 25.

Ogawa arguably discloses that the support on which the magnetic layers are formed may be a plastic film consisting of a polyester such as polyethylene terephthalate, polyethylene naphthalate etc., a polyolefin such as polypropylene, a cellulose derivative such as cellulose triacetate, cellulose diacetate, etc., vinyl based resins such as polyvinyl chloride, a polycarbonate, a polyamide or a polysulfone etc.; or a metal such as aluminum, copper, etc.; or a ceramic such as glass; etc. (Ogawa at column 4, lines 23-31).

However, within claim 25, the core has a maximum outer diameter and a minimum outer diameter, the difference between said maximum and minimum outer diameters of the core being not more than 300×10^{-6} m.

Here, Ogawa is *silent* as to the features of a core found within independent claim 25.

Thus, Ogawa *fails* to disclose, teach, or suggest a polyester film roll *wherein the core has a maximum outer diameter and a minimum outer diameter, the difference between the maximum and minimum outer diameters of the core being not more than 300×10^{-6} m.*

iv. The Examiner erred in rejecting claims 47-48 under 35 U.S.C. §103 as allegedly being unpatentable over U.S. Patent No. 4,576,344 (Sasaki) in view of U.S. Patent No. 3,427,723 (Leckey).

A. For this rejection only, claims 47-48 stand or fall together.

Claim 48 is dependent upon claim 47.

Claim 47 is drawn to the polyester film roll described in claim 25,	
wherein a plurality of diameters of said roll along the width direction of the roll is represented by a curved line having ends, a straight line connecting said ends of the curved line,	Specification paragraph beginning on page 8, line 9; Specification paragraph
wherein a maximum length from a maximum convex portion of said curved line to said straight line is not more than 500 μ m.	beginning on page 6, line 19; Specification paragraph beginning on page 7, line 14

1. Arguments presented hereinabove with respect to U.S. Patent No. 4,576,344 (Sasaki) are incorporated by reference.

For the purpose of brevity, the argument presented hereinabove regarding Sasaki are incorporated herein by reference.

2. U.S. Patent No. 3,427,723 (Leckey)

- a) Leckey fails to disclose, teach, or suggest a polyester film roll *wherein the core has a maximum outer diameter and a minimum outer diameter, the difference between the maximum and minimum outer diameters of the core being not more than 300×10^{-6} m of claim 25.*

Claim 39 is dependent upon claim 25.

Within claim 25, the core has a maximum outer diameter and a minimum outer diameter, the difference between said maximum and minimum outer diameters of the core being not more than 300×10^{-6} m.

However, Leckey is silent as to the features of a core found within independent claim 25.

Thus, Leckey fails to disclose, teach, or suggest a polyester film roll *wherein the core has a maximum outer diameter and a minimum outer diameter, the difference between the maximum and minimum outer diameters of the core being not more than 300×10^{-6} m.*

- b) Leckey fails to disclose, teach, or suggest a polyester film roll.

Leckey is silent as to the presence of a polyester film roll.

Instead, Leckey arguably discloses the presence of paper roll 20.

In this regard, the Office Action fails to explain how and why the skilled artisan would have considered the paper roll 20 of Leckey to have been a suitable substitute for the polyester film roll 4 of Sasaki.

- c) Leckey fails to disclose, teach, or suggest a polyester film roll wherein a maximum length from a maximum convex portion of said curved line to said straight line is not more than 500 μm .

Page 6 of the Office Action asserts, without providing any objective evidence, that:

It would have been obvious to one of ordinary skill in the art that if a graphical representation of the roll were to be obtained, the maximum length from a maximum convex portion of the curved line of the roll of Sasaki et al would not be greater than 300 μm or 500 μm because it is a wrinkle free roll.

In response, there is no concession as to the veracity of this assertion.

Furthermore, the portion of the assertion “*if a graphical representation of the roll were to be obtained*” fails to positively state that a graphical representation of the roll is even obtainable.

In addition, the fact that a certain result or characteristic may occur or be present in the prior art is not sufficient to establish the inherency of that result or characteristic. *In re Rijckaert*, 28 USPQ2d 1955, 1957 (Fed. Cir. 1993).

Inherency requires that the missing descriptive material is “necessarily present,” not merely probably or possibly present, in the prior art.” *Trintec Indus., Inc. v. Top-U.S.A. Corp.*, 63 USPQ2d 1597, 1599 (Fed. Cir. 2002).

Here, the Office Action fails to provide any objective evidence for showing that being a “*wrinkle free roll*” would necessarily result in a “*maximum length from a maximum convex portion of the curved line of the roll of Sasaki et al not being greater than 300 μm or 500 μm* ”.

Such a retrospective view of any alleged “inherent” feature is not a substitute for some teaching or suggestion supporting an obviousness rejection. *In re Rijckaert*, 28 USPQ2d 195 5, 1957 (Fed. Cir. 1993).

Instead, a patentable invention, within the ambit of 35 U.S.C. §103 may result even if the inventor has, in effect, merely combined features, old in the art, for their known purpose, without producing anything beyond the results inherent in their use. *In re Sponnoble*, 160 USPQ 237, 243 (CCPA 1969).

Leckey is silent as to the presence of a polyester film roll, as previously noted.

Instead, Leckey arguably discloses the presence of paper roll 20.

Finally, while Leckey arguably discloses the presence of a measuring apparatus, Leckey is silent as to a maximum length from a maximum convex portion of a curved line to a straight line being not more than 500 μm .

v. Discovery of an optimum value of a variable.

The discovery of an optimum value of a variable in a known process is normally obvious. *In re Aller*, 105 USPQ 233 (1955).

The mere determination of a suitable range of values for a suggested result-effective variable or agent is considered to be *prima facie* within the realm of ordinary skill. *Vanderkooi v. Hoeschele*, 7 USPQ2d 1253, 1255 (Bd. Pat. App. & Int. 1987).

Within claim 25, *the core has a maximum outer diameter and a minimum outer diameter, the difference between the maximum and minimum outer diameters of the core being not more than $300 \times 10^{-6} \text{ m}$.*

A. Exception to the “optimization” rule of *In re Aller* - parameter allegedly optimized was not recognized in the prior art as one that would affect the results.

An exception to the “optimization” rule of *In re Aller* is where the parameter optimized was not recognized in the prior art as one that would affect the results. *Ex parte Whalen*, 89 USPQ2d 1078, 1083 (Bd. Pat. App. & Int. 2008).

Here, the Office Action fails to highlight a disclosure within U.S. Patent No. 4,576,344 (Sasaki), U.S. Patent No. 5,106,681 (Endo), U.S. Patent No. 4,911,951 (Ogawa), or U.S. Patent No. 3,427,723 (Leckey) that *a maximum outer diameter and a minimum outer diameter of the core is* a parameter recognized in the prior art as one that would affect the results.

Regarding the alleged optimization, in a prior opinion of the Board, Judge Grimes has explained the following in *Ex parte Whalen*, 89 USPQ2d 1078, 1083-1084 (Bd. Pat. App. & Int. 2008):

[3] *The Examiner has not made out a prima facie case that the claimed compositions would have been obvious based on the teachings of Evans, Greff'767, or Taki. While “the discovery of an optimum value of a variable in a known process is normally obvious,” In re Antonie, 559 F.2d 618, 620 [195 USPQ 6] (C.C.P.A. 1977), this is not always the case. One exception to the rule is where the parameter optimized was not recognized in the prior art as one that would affect the results. Id. Here, the Examiner has not pointed to any teaching in the cited references, or provided any explanation based on scientific reasoning, that would support the conclusion that those skilled in the art would have considered it obvious to “optimize” the prior art compositions by increasing their viscosity to the level recited in the claims. No reason to have done so is apparent to us based on the record. On the contrary, the references all suggest that low viscosity was a desired property in embolic compositions. Evans teaches that a preferred composition has a*

viscosity of 60 centipoise or less at 20° C (FF12). Appellants calculate, and the Examiner does not dispute, that 60 centipoise at 20° C corresponds to less than 75 cSt at 40° C (App. Br. 12). Therefore, Evans' preferred composition has a viscosity less than half of that required by the instant claims.

Likewise, Greff '767 teaches that a composition with a viscosity of 145 cSt at 20° C had "physical properties which make[] injection ... into vascular sites significantly more difficult" (FF20, FF22) — and the only physical property of the composition discussed is its viscosity. In agreement with the other references, Taki teaches that its composition had a low viscosity (FF24) and had the desirable property of being easily injected through a microballoon catheter (FF24).

Thus, the references teach that low viscosity is a desirable characteristic for embolic compositions. In our view, none of the cited references would have led a person of ordinary skill in the art to modify the known embolic compositions by increasing their viscosity to at least 150 cSt at 40° C. The Examiner has not adequately explained why such a modification would have been obvious.

To have a reasonable expectation of success, one must be motivated to do more than merely to vary all parameters or try each of numerous possible choices until one possibly arrived at a successful result, where the *prior art* gave either no indication of which parameters were critical or no direction as to which of many possible choices is likely to be successful. *Pfizer Inc. v. Apotex Inc.*, 82 USPQ2d 1321, 1333 (Fed. Cir. 2007).

However, the Office Action fails to highlight any objective teaching within the cited prior art to indicate which parameters within any of Sasaki, Endo, Ogawa, and Leckey were critical or which of the many possible choices within Sasaki, Endo, Ogawa, and Leckey is likely to have been successful.

B. Exception to the “optimization” rule - unexpectedly good results.

Another exception to the “optimization” rule of *In re Aller* is in cases where the results of optimizing a variable, which was known to be result effective, were unexpectedly good. *In re Antonie*, 195 USPQ 6, 8-9 (C.C.P.A. 1977)(The decision of the board is *reversed*).

Here, it is respectfully submitted that the Office Action had not made a *prima facie* case of obviousness respecting the claims, and that evidence of comparative testing is unnecessary in rebuttal. *In re Clemens, Hurwitz, and Walker*, 206 USPQ 289, 296 (C.C.P.A. 1980).

But even if the Office Action had made a *prima facie* case of obviousness, one way for a patent applicant to rebut a *prima facie* case of obviousness is to make a showing of “unexpected results,” i.e., to show that the claimed invention exhibits some superior property or advantage that a person of ordinary skill in the relevant art would have found surprising or unexpected. *In re Geisler*, 43 USPQ2d 1362, 1365 (Fed. Cir. 1997).

All evidence of nonobviousness must be considered when assessing patentability. *Richardson-Vicks Inc. v. The Upjohn Co.*, 44 USPQ2d 1181, 1186 (Fed. Cir. 1997).

Consistent with the rule that all evidence of nonobviousness must be considered when assessing patentability, the PTO must consider comparative data in the specification in determining whether the claimed invention provides unexpected results. *In re Soni*, 34 USPQ2d 1684, 1687 (Fed. Cir. 1995). See also, *In re Wright*, 6 USPQ2d 1959, 1962 (Fed. Cir. 1988).

Here, the specification as originally filed notes the following in the paragraph beginning at page 5, line 30:

The outer diameter of the roll-shaped core of the polyester film roll in the present invention is especially not limited, but is usually 0.100 to 0.400 m. When the outer diameters of the roll shape of the core are measured in the width direction of the core, the difference (Rc) between the maximum value and the minimum value is

preferably not more than 300×10^{-6} m, further preferably 200×10^{-6} m. When the difference (R_c) exceeds 300×10^{-6} m, the core is not preferable, because wrinkles and slacks are generated in the film roll by the effect of the core, even when the thickness unevenness of the polyester film is small. The roll shape of the core is desirably a crown shape in which the central portion of the core in the width direction and both the end portions of the core are thick and thin, respectively. The crown shape facilitates the outward removal of air between the films and the inhibition of wrinkle generation, when the polyester film is rolled. In the core of the crown shape, the difference between the diameter of the central portion and the diameters of both the end portions is preferably in the range of 0 m to 300×10^{-6} m.

Conclusion

The claims are considered allowable for the same reasons discussed above, as well as for the additional features they recite.

Reversal of the Examiner's decision is respectfully requested.

If any fee is required or any overpayment made, the Commissioner is hereby authorized to charge the fee or credit the overpayment to Deposit Account # 18-0013.

Dated: December 23, 2010

Respectfully submitted,

By _____

Christopher M. Tobin

Registration No.: 40,290

RADER, FISHMAN & GRAUER PLLC

Correspondence Customer Number: 23353

Attorneys for Applicant

CLAIMS APPENDIX

1-24. (Canceled)

25. A polyester film roll comprising:

a roll of polyester film, said polyester film being rolled onto a core,

wherein said core has a maximum outer diameter and a minimum outer diameter, the difference between said maximum and minimum outer diameters of the core being not more than 300×10^{-6} m.

26. The polyester film roll described in claim 25, wherein said maximum and minimum outer diameters of the core are along the width direction of the core.

27. The polyester film roll described in claim 25, wherein said maximum outer diameter of the core is at a central portion of the core.

28. The polyester film roll described in claim 27, wherein said minimum outer diameter of the core is at an end portion of the core.

29. The polyester film roll described in claim 25, wherein the flexural modulus of said core in the circumferential direction is not less than 13 Gpa.

30. The polyester film roll described in claim 25, wherein the surface roughness of said core is not more than $0.6 \mu\text{m}$.

31. The polyester film roll described in claim 25, wherein the degree of surface hardness of the core is not less than 65 degree.

32. The polyester film roll described in claim 25, wherein the degree of rolling hardness of said roll is 90 to 100.

33. The polyester film roll described in claim 25, wherein the difference between a maximum outer diameter of the roll and a minimum outer diameter of the roll is not more than $2W \times 10^{-3}$ and not more than $L \times 10^{-7}$, "W" being the width of the roll and "L" being the rolled length of the polyester film.

34. The polyester film roll described in claim 33, wherein said maximum and minimum outer diameters of the roll are along the width direction of the roll.

35. The polyester film roll described in claim 33, wherein said rolled length of said polyester film is not less than 4,000 m.

36. The polyester film roll described in claim 33, wherein said width of the roll is not less than 300 mm.

37. The polyester film roll described in claim 25, wherein the surface roughness of said polyester film is 1 to 10 nm.

38. The polyester film roll described in claim 25, wherein the thickness of said polyester film is 2 to 10 μm .

39. The polyester film roll described in claim 25, wherein said polyester film contains inactive particles.

40. The polyester film roll described in claim 39, wherein said inactive particles is from the group consisting of calcium carbonate particles, alumina particles, spherical silica particles, and titanium oxide particles, and organic particles represented by cross-linked silicone resin particles, cross-linked polystyrene resin particles, cross-linked acrylic resin particles, cross-linked polyester resin particles, cross-linked styrene-acrylic resin particles, polyimide particles, melamine resin particles.

41. The polyester film roll described in claim 39, wherein said inactive particles an average particle diameter of said inactive particles is not less than $0.01\mu\text{m}$ and not more than $2.0\mu\text{m}$.

42. The polyester film roll described in claim 39, wherein a content of said inactive particles is not less than not less than 0.001 percent by weight and not more than 2.0 percent by weight.

43. The polyester film roll described in claim 25, wherein said polyester film supports a magnetic recording medium.

44. The polyester film roll described in claim 43, wherein a coating layer is between said polyester film and said magnetic recording medium.

45. The polyester film roll described in claim 43, wherein said magnetic recording medium is a ferromagnetic metal thin film layer.

46. The polyester film roll described in claim 43, wherein said magnetic recording medium is a digital recording method magnetic recording medium.

47. The polyester film roll described in claim 25, wherein a plurality of diameters of said roll along the width direction of the roll is represented by a curved line having ends, a straight line connecting said ends of the curved line,

wherein a maximum length from a maximum convex portion of said curved line to said straight line is not more than 500 μm .

48. The polyester film roll described in claim 47, wherein a maximum length from a maximum concave portion of said curved line to said straight line is not more than 300 μm .

EVIDENCE APPENDIX

There is no other evidence which will directly affect or have a bearing on the Board's decision in this appeal.

RELATED PROCEEDINGS APPENDIX

The instant application on appeal

An Appeal Brief (“the **First** Appeal Brief”) has been filed in the instant application on September 5, 2006.

In response to the Examiner’s Answer of October 2, 2007, a Reply Brief was filed on December 3, 2007.

A Decision of the Board of Patent Appeals and Interferences was mailed in the instant application on April 30, 2009.

The Decision of April 30, 2009 **reversed the final rejection** of the examiner as to all of the pending claims within the instant application.

Subsequent to the Decision of the Board dated April 30, 2009, the non-final Office Action of September 2, 2009 **reopened prosecution** of the instant application.

An Appeal Brief (“the **Second** Appeal Brief”) has been filed in the instant application on November 18, 2009 along with a Petition Under 37 C.F.R. §1.181.

The Decision on Petition dated March 5, 2010 granted-in-part the Petition Under 37 C.F.R. §1.181.

Prior to a Decision from the Board, the non-final Office Action dated May 17, 2010 again **reopened prosecution** of the instant application.

Following an Amendment in Response to Non-Final Office Action filed on July 29, 2010, the Final Office Action dated October 26, 2010 was mailed in the instant application.

This Appeal Brief (“the Third Appeal Brief”) is in furtherance of the Final Office Action of October 26, 2010.

Continuation of the instant application

U.S. Patent Application No. 10/832,279 is a continuation of the instant application.

An Appeal Brief has been filed in the continuation application on October 9, 2007.

In response to the Examiner’s Answer of January 8, 2008, a Reply Brief was filed on March 10, 2008.

A Decision of the Board of Patent Appeals and Interferences was mailed on May 7, 2009 in U.S. Patent Application No. 10/832,279.

The Decision of May 7, 2009 reversed the final rejection of the examiner as to all of the pending claims within the continuation application.

Subsequent to the Decision of the Board dated May 7, 2009, the non-final Office Action of September 29, 2009 reopened prosecution of the continuation application.

An Appeal Brief has been filed in the instant application on December 23, 2009 along with a Petition Under 37 C.F.R. §1.181.

The Decision on Petition dated March 24, 2010 denied the Petition Under 37 C.F.R. §1.181.

An Examiner’s Answer of October 27, 2010 has been mailed in response to the Appeal Brief of December 23, 2009.

No other appeals or interferences

There are no other appeals or interferences which will directly affect or be directly affected by or have a bearing on the Board's decision in this appeal.